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(54) Title: PAPER COATING PIGMENTS

(57) Abstract: A coating composition for paper and other substrates, particularly mechanical papers such as lightweight coated (LWC) paper, comprises an aqueous suspension of a particulate pigment together with a binder, wherein the particulate pigment comprises: (a) a first component which is a precipitated calcium carbonate consisting predominantly of aragonitic or rhombohedral particle shapes or of aragonitic and rhombohedral particle shapes in a weight ratio of between around 40:60 and about 60:40 (e.g. about 50:50) aragonitic:rhombohedral, and a second component which is a processed particulate hydrous kaolin clay having a shape factor greater than or equal to about 25 and a steepness greater than or equal to about 20; or (b) a first component which is a fine particulate calcium carbonate consisting predominantly of particles having a generally spherical particle shape, and a second component which is a processed particulate hydrous kaolin clay having a shape factor greater than or equal to about 45 and a mean equivalent particle diameter ( $d_{50}$ ) less than about 0.5  $\mu\text{m}$ ; or (c) a first component which is a precipitated calcium carbonate consisting predominantly of aragonitic and rhombohedral particle shapes in a weight ratio of between about 40:60 and about 60:40 (e.g. about 50:50) aragonitic:rhombohedral, and a second component which is a processed particulate hydrous kaolin clay having a shape factor less than about 25.

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